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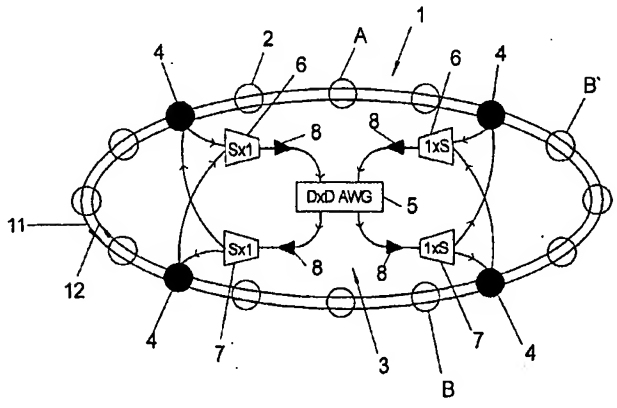
(54) Title: A HYBRID OPTICAL NETWORK AND A METHOD OF ROUTING DATA PACKETS IN A HYBRID OPTICAL NETWORK



(57) Abstract: The invention regards a hybrid optical network comprising a single channel optical ring network (1) with a plurality of ring nodes (2) and a star subnetwork (3). The star subnetwork (3) comprises a central wavelength router (5), a plurality of combiners (6) being connected to input ports of the central wavelength router (5), and a subset of the ring nodes (4) of the ring network, each node (4) of the subset including a tunable transmitter (26) and a tunable receiver (25) to communicate optical data packets over the star subnetwork (3). Optical data packets routed between two ring nodes (4) of the subset over the star subnetwork (3) are assigned a specific wavelength that determines the routing of the data packets through the central wavelength router (5). The invention further regards a method of routing data packets between a source ring node (2, A) and a destination ring node (2, B) of a hybrid optical network. The method includes pulling incoming data packets from the optical ring network at a subset node of the star subnetwork which is neither a source node nor a destination node, and transmitting the pulled data packets over the star subnetwork (3).

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